

ARG40426 anti-MCM2 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes MCM2
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Target Name	MCM2
Species	Human
Immunogen	Purified recombinant fragment of Human MCM2.
Conjugation	Un-conjugated
Alternate Names	CCNL1; Nuclear protein BM28; BM28; DNA replication licensing factor MCM2; cdc19; Minichromosome maintenance protein 2 homolog; MITOTIN; CDCL1; D3S3194; EC 3.6.4.12

Application Instructions

Application table	Application	Dilution
	FACS	1:200 - 1:400
	ICC/IF	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
	IP	Assay-dependent
	WB	1:500 - 1:2000
	Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

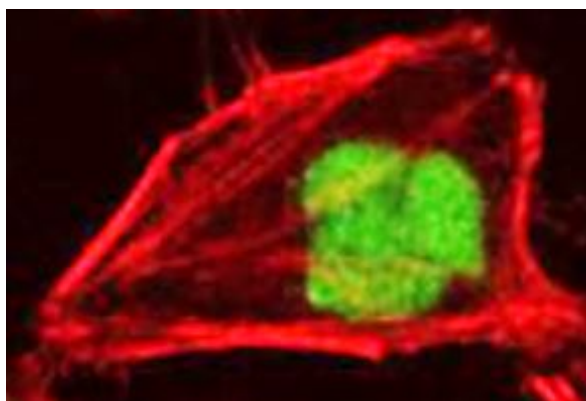
Properties

Form	Liquid
Purification	Unpurified.
Buffer	Ascitic fluid and 0.03% Sodium azide.
Preservative	0.03% Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

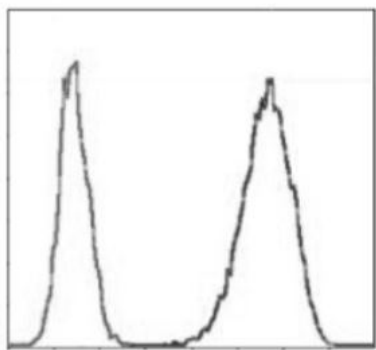
Gene Symbol	MCM2
Gene Full Name	minichromosome maintenance complex component 2
Background	<p>The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein forms a complex with MCM4, 6, and 7, and has been shown to regulate the helicase activity of the complex. This protein is phosphorylated, and thus regulated by, protein kinases CDC2 and CDC7. Multiple alternatively spliced transcript variants have been found, but the full-length nature of some variants has not been defined. [provided by RefSeq, Oct 2012]</p>
Function	<p>Acts as component of the MCM2-7 complex (MCM complex) which is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. The active ATPase sites in the MCM2-7 ring are formed through the interaction surfaces of two neighboring subunits such that a critical structure of a conserved arginine finger motif is provided in trans relative to the ATP-binding site of the Walker A box of the adjacent subunit. The six ATPase active sites, however, are likely to contribute differentially to the complex helicase activity. Required for the entry in S phase and for cell division. [UniProt]</p>
Calculated Mw	102 kDa
PTM	<p>Phosphorylated on Ser-108 by ATR in proliferating cells. Ser-108 proliferation is increased by genotoxic agents. Ser-40 is mediated by the CDC7-DBF4 and CDC7-DBF4B complexes, while Ser-53 phosphorylation is only mediated by the CDC7-DBF4 complex. Phosphorylation by the CDC7-DBF4 complex during G1/S phase is required for the initiation of DNA replication. [UniProt]</p>
Cellular Localization	Nucleus. [UniProt]

Images



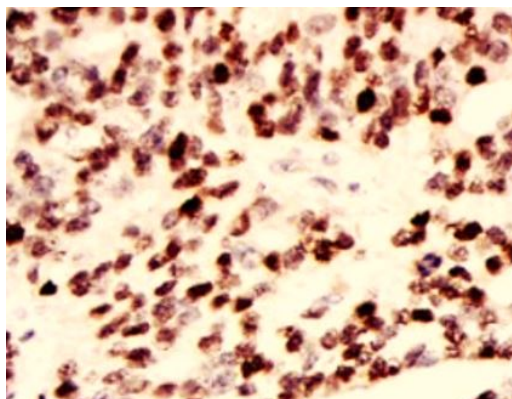
ARG40426 anti-MCM2 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG40426 anti-MCM2 antibody.



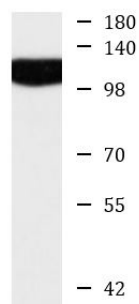
ARG40426 anti-MCM2 antibody FACS image

Flow Cytometry: Jurkat cells stained with ARG40426 anti-MCM2 antibody (right histogram) and negative control (left histogram).



ARG40426 anti-MCM2 antibody IHC-P image

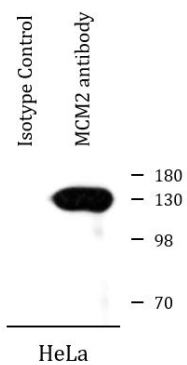
Immunohistochemistry: Paraffin-embedded ovarian cancer tissue stained with ARG40426 anti-MCM2 antibody.



K562

ARG40426 anti-MCM2 antibody WB image

Western blot: K562 cell lysate stained with ARG40426 anti-MCM2 antibody at 1:3000 dilution.



HeLa

ARG40426 anti-MCM2 antibody IP image

Immunoprecipitation: HeLa cells were immunoprecipitated and stained with ARG40426 anti-MCM2 antibody.